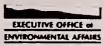
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Office of Technical Assistance
Executive Office of Environmental Affairs
Commonwealth of Massachusetts

# **Toxics Use Reduction Case Study**

## **VOC REDUCTION AT HAMPDEN PAPERS**

### **SUMMARY**

Hampden Papers Inc. of Holyoke, Massachusetts, reduced emissions of volatile organic compounds (VOCs) by 97% over a ten-year period by using new aqueous-based acrylics developed by I.C.I. Resins US of Wilmington, Massachusetts. The reduction of VOCs has resulted in lower compliance costs, savings on insurance premiums, and a safer work environment. The avoidance of expenditures on VOC controls has helped Hampden to afford investments in high-quality production equipment.

#### **BACKGROUND**

Hampden is a 180-worker speciality manufacturer of converted film, foils and boards, which has been in operation in Holyoke for 112 years. The company has 64 production machines in its 300,000 square foot facility. Its printed, coated, laminated and embossed products are sold in more than 80 markets. In the early 1970's, when environmental legislation first began affecting VOC-emitting operations, former company president Frank Fowler elected to pursue reduction at the source rather than emission control.

#### TOXICS USE REDUCTION PLANNING

Bob Fowler, current company president, has continued on his father's course. The company tested and put into application new coating systems using non-VOC and low-VOC inks and coatings developed by I.C.I. Resins. Hampden also uses gas oven drying and electron beam curing where necessary. Because of its strategy of reformulation and equipment modernization, Hampden has not had to purchase VOC collection and control equipment, nor has it had to install explosion-proof mixers for inks and coatings containing VOCs.

Because aesthetics are a primary concern in the markets that Hampden serves, the company had to consider the risk of customer rejection of reformulated products. As it turns out, Hampden has been able to expand its customer base, and production output has increased. The source reduction strategy paid off; regulation of VOCs has become tighter, not just under clean air legislation but also under occupational rexposure rules and new toxics use and release reporting laws.

